IN THE CLAIMS

Amend the claims as follows:

Claims 1-35 (cancelled).

Claim 36. (Currently amended) An immunoassay kit comprising a ~~dry~~ solid phase coated with an HCV NS3 protein ~~antigen~~ which has been ~~reduced by a reducing agent~~ produced by a method comprising the steps of sulphonation and subsequent desulphonation.

Claim 37. (Currently amended) An immunoassay kit comprising a ~~dry~~ solid phase coated with an HCV NS3 protein ~~antigen~~ wherein said immunoassay kit has been produced by a method comprising the steps of sulphonation of said HCV NS3 protein and subsequent desulphonation ~~by adding a reducing agent~~ in at least one of the following steps:

(i) coating of said solid phase with said antigen;

(ii) blocking said solid phase;

(iii) fixation of the proteins coated on said solid phase;

(iv) pretreatment of said solid phase.

Claim 38. (Currently amended) An immunoassay kit ~~comprising an HCV NS3 protein antigen and a reducing agent on a dry solid phase~~ according to claims 36 or 37 wherein said desulphonation is performed in the presence of a reducing agent.

Claim 39. (Currently Amended) The immunoassay kit according to any of claims 36 to ~~38 wherein~~ 37 wherein said HCV NS 3 protein is an HCV NS3 amino acid sequence selected from the group consisting of SEQ ID NO:3-18.

Claim 40. (Currently Amended) The immunoassay kit according to any of claims 36 to ~~38 wherein~~ 37 wherein said HCV NS3 protein is contained in a fusion protein.

Claim 41. (Previously presented) The immunoassay kit according to claim 39 wherein said HCV NS3 protein is contained in a fusion protein.

Claim 42. (Withdrawn) The immunoassay kit according to claim 40 wherein said fusion protein is selected from the group of amino acid sequences consisting of SEQ ID NO:20, SEQ ID NO:22, SEQ ID NO:24, SEQ ID NO:26, SEQ ID NO:28, SEQ ID NO:30 and SEQ ID NO:32.

Claim 43. (Withdrawn) The immunoassay kit according to claim 41 wherein said fusion protein is selected from the group of amino acid sequences consisting of SEQ ID NO:20, SEQ ID NO:22, SEQ ID NO:24, SEQ ID NO:26, SEQ ID NO:28, SEQ ID NO:30 and SEQ ID NO:32.

Claim 44. (Currently amended) The immunoassay kit according to any of claims 36 ~~to 38~~ to 37 wherein said HCV NS3 protein is an HCV NS3 helicase protein or part thereof containing at least one epitope consisting of at least 5 or 6 amino acid residues, said epitope ~~, said protein or part thereof~~ containing at least one amino acid selected from the group consisting of S1200, A1218, A1384, P1407, V1412, P1424, and F1444; or a combination of one of said at least one amino acid with at least one amino acid selected from the group consisting of L1201, S1222, I1274, S1289, T1321, A1323, T1369, L1382, V1408, A1409, and F1410.

Claim 45. (Currently amended) The immunoassay kit according to claim 39 wherein said HCV NS3 protein is an HCV NS3 helicase protein or part thereof containing at least one epitope consisting of at least 5 or 6 amino acid residues, said epitope~~, said protein or part thereof~~ containing at least one amino acid selected from the group consisting of S1200, A1218, A1384, P1407, V1412, P1424, and F1444; or a combination of one of said at least one amino acid with at least one amino acid selected from the group consisting of L1201, S1222, I1274, S1289, T1321, A1323, T1369, L1382, V1408, A1409, and F1410.

Claim 46. (Currently amended) The immunoassay kit according to claim 40 wherein said HCV NS3 protein is an HCV NS3 helicase protein or part thereof containing at least one epitope consisting of at least 5 or 6 amino acid residues, said epitope~~, said protein or part thereof~~ containing at least one amino acid selected from the

group consisting of S1200, A1218, A1384, P1407, V1412, P1424, and F1444; or a combination of one of said at least one amino acid with at least one amino acids selected from the group consisting of L1201, S1222, I1274, S1289, T1321, A1323, T1369, L1382, V1408, A1409, and F1410.

Claim 47. (Currently amended) The immunoassay kit according to claim 41 wherein said HCV NS3 protein is an HCV NS3 helicase protein or part thereof containing at least one epitope consisting of at least 5 or 6 amino acid residues, said epitope, ~~said protein or part thereof~~ containing at least one amino acid selected from the group consisting of S1200, A1218, A1384, P1407, V1412, P1424, and F1444; or a combination of one of said at least one amino acid with at least one amino acid selected from the group consisting of L1201, S1222, I1274, S1289, T1321, A1323, T1369, L1382, V1408, A1409, and F1410.

Claim 48. (Currently amended) The immunoassay kit according to claim 42 wherein said HCV NS3 protein is an HCV NS3 helicase protein or part thereof containing at least one epitope consisting of at least 5 or 6 amino acid residues, said epitope, ~~said protein or part thereof~~ containing at least one amino acid selected from the group consisting of S1200, A1218, A1384, P1407, V1412, P1424, and F1444; or a combination of one of said at least one amino acid with at least one amino acid selected from the group consisting of L1201, S1222, I1274, S1289, T1321, A1323, T1369, L1382, V1408, A1409, and F1410.

Claim 49. (Currently amended) The immunoassay kit according to claim 43 wherein said HCV NS3 protein is an HCV NS3 helicase protein or part thereof containing at least one epitope consisting of at least 5 or 6 amino acid residues, said epitope~~, said protein or part thereof~~ containing at least one amino acid selected from the group consisting of S1200, A1218, A1384, P1407, V1412, P1424, and F1444; or a combination of one of said at least one amino acid with at least one amino acid selected from the group consisting of L1201, S1222, I1274, S1289, T1321, A1323, T1369, L1382, V1408, A1409, and F1410.

Claims 50-61. (Canceled)

Claim 62. (Currently Amended) The immunoassay kit according to any of claims 36-37 ~~claim 50~~ wherein said HCV NS3 protein is additionally treated with a zwitter-ionic detergent.

Claim 63. (Previously presented) The immunoassay kit according to claim 62 wherein said HCV NS3 protein is treated with *n*-dodecyl-N,N-dimethylglycine as zwitter-ionic detergent.

Claim 64. (Currently Amended) A method for producing an immunoassay kit according to any of claims 36 ~~to 38~~ to 37 wherein said method comprises the steps of sulphonation of the HCV NS3 protein and subsequent desulphonation ~~is performed reducing agent is present in at least one of the following steps:~~

~~(i) coating of said solid phase with said antigen; and~~

~~(ii) after (i), blocking said solid phase; and~~

~~(iii) after (ii), fixation of the proteins coated on said solid phase; and~~

~~(iv) after (iii), pretreatment of said solid phase~~.

Claim 65. (Currently Amended) The method according to claim ~~64 wherein~~ 79 wherein said ~~method comprising the steps of sulphonation and subsequent~~ desulphonation is performed ~~reducing agent is added~~ in step (i).

Claim 66. (Currently Amended) The method according to claim ~~64 wherein~~ 79 wherein said ~~method comprising the steps of sulphonation and subsequent~~ desulphonation is performed ~~reducing agent is added~~ in step (ii).

Claim 67. (Currently Amended) The method according to claim ~~64 wherein~~ 79 wherein said ~~method comprising the steps of sulphonation and subsequent~~ desulphonation is performed ~~reducing agent is added~~ in steps (i) and (ii).

Claim 68. (Currently Amended) The method according to claim ~~64 wherein~~ 79 wherein said ~~method comprising the steps of sulphonation and subsequent~~ desulphonation is performed ~~reducing agent is added~~ in step (iii).

Claim 69. (Currently Amended) The method according to claim ~~64 wherein~~ 79 wherein said ~~method comprising the steps of sulphonation and subsequent~~ desulphonation is performed ~~reducing agent is added~~ in steps (i) and (iii).

Claim 70. (Currently Amended) The method according to claim ~~64 wherein~~ 79 wherein said ~~method comprising the steps of sulphonation and subsequent~~ desulphonation is performed ~~reducing agent is added~~ in step (iv).

Claim 71. (Currently Amended) The method according to claim ~~64 wherein~~ 79 wherein said ~~method comprising the steps of sulphonation and subsequent~~ desulphonation is performed ~~reducing agent is added~~ in steps (i) and (iv).

Claim 72. (Currently Amended) The method according to claim 64 wherein said desulphonation is performed in presence of a reducing agent selected from ~~reducing agent is~~ DTT, DTE or TCEP.

Claim 73. (Currently Amended) The method according claim ~~64 wherein~~72 wherein said reducing agent is used in a concentration range of 0.1 mM to 1 M.

Claim 74. (Currently Amended) The immunoassay kit according to any of claims 36 ~~to 38~~ to 37 which is an ELISA kit, a QUICK test kit or a Line Immunoassay kit.

Claim 75. (Previously Presented) The method according to claim 64 wherein said produced immunoassay kit is an ELISA kit, a QUICK test kit or a Line Immunoassay kit.

Claim 76. (Currently Amended) The immunoassay kit according to any of claims 36 ~~to 38~~ to 37 wherein said solid phase is selected from the group consisting of a microtiter plate, a nylon strip, a nitrocellulose strip and a silicon chip.

Claim 77. (Previously Presented) The immunoassay kit according to claim 76 wherein said solid phase further comprises at least one of a positive control and a +/- cutoff control.

Claim 78. (Currently Amended) The immunoassay kit according to any of claims 36 ~~to 38~~to 37, said solid phase further comprising at least one additional HCV antigen selected from the group consisting of an antigen of the Core region, an antigen of the E2 hypervariable region, an antigen of the NS4A region, an antigen of the NS4B region, and an antigen of the NS5A region.

Claim 79. (new) A method for producing an immunoassay kit according to claim 64 wherein the desulphonation is performed in at least one of the following steps:

(i) coating of said solid phase with said antigen; and

(ii) after (i), blocking said solid phase; and

(iii) after (ii), fixation of the proteins coated on said solid phase; and

(iv) after (iii), pretreatment of said solid phase.

Claim 80. (new) The immunoassay kit according to claim 38 wherein said HCV NS 3 protein is an HCV NS3 amino acid sequence selected from the group consisting of SEQ ID NO:3-18.

Claim 81. (new) The immunoassay kit according to claim 38 wherein said HCV NS3 protein is contained in a fusion protein.

Claim 82. (new) The immunoassay kit according to claim 80 wherein said HCV NS3 protein is contained in a fusion protein.

Claim 83. (new) The immunoassay kit according to claim 38 wherein said HCV NS3 protein is an HCV NS3 helicase protein or part thereof containing at least one epitope consisting of at least 5 or 6 amino acid residues, said epitope containing at least one amino acid selected from the group consisting of S1200, A1218, A1384, P1407, V1412, P1424, and F1444; or a combination of one of said at least one amino acid with at least one amino acid selected from the group consisting of L1201, S1222, I1274, S1289, T1321, A1323, T1369, L1382, V1408, A1409, and F1410.

Claim 84. (new) The immunoassay kit according to claim 80 wherein said HCV NS3 protein is an HCV NS3 helicase protein or part thereof containing at least one epitope consisting of at least 5 or 6 amino acid residues, said epitope containing at least

one amino acid selected from the group consisting of S1200, A1218, A1384, P1407, V1412, P1424, and F1444; or a combination of one of said at least one amino acid with at least one amino acid selected from the group consisting of L1201, S1222, I1274, S1289, T1321, A1323, T1369, L1382, V1408, A1409, and F1410.

Claim 85. (new) The immunoassay kit according to claim 81 wherein said HCV NS3 protein is an HCV NS3 helicase protein or part thereof containing at least one epitope consisting of at least 5 or 6 amino acid residues, said epitope containing at least one amino acid selected from the group consisting of S1200, A1218, A1384, P1407, V1412, P1424, and F1444; or a combination of one of said at least one amino acid with at least one amino acids selected from the group consisting of L1201, S1222, I1274, S1289, T1321, A1323, T1369, L1382, V1408, A1409, and F1410.

Claim 86. (new) The immunoassay kit according to claim 82 wherein said HCV NS3 protein is an HCV NS3 helicase protein or part thereof containing at least one epitope consisting of at least 5 or 6 amino acid residues, said epitope containing at least one amino acid selected from the group consisting of S1200, A1218, A1384, P1407, V1412, P1424, and F1444; or a combination of one of said at least one amino acid with at least one amino acid selected from the group consisting of L1201, S1222, I1274, S1289, T1321, A1323, T1369, L1382, V1408, A1409, and F1410.

Claim 87. (new) The immunoassay kit according to claim 38 wherein said HCV NS3 protein is additionally treated with a zwitter-ionic detergent.

Claim 88. (new) The immunoassay kit according to claim 87 wherein said HCV NS3 protein is treated with *n*-dodecyl-N,N-dimethylglycine as zwitter-ionic detergent.

Claim 89. (new) A method for producing an immunoassay kit according to claim 38 wherein said method comprises the steps of sulphonation of the HCV NS3 protein and subsequent desulphonation.

Claim 90. (new) A method for producing an immunoassay kit according to claim 89 wherein the desulphonation is performed in at least one of the following steps:

(i) coating of said solid phase with said antigen; and

(ii) after (i), blocking said solid phase; and

(iii) after (ii), fixation of the proteins coated on said solid phase; and

(iv) after (iii), pretreatment of said solid phase.

Claim 91. (new) The method according to claim 90 wherein said desulphonation is performed in step (i).

Claim 92. (new) The method according to claim 90 wherein said desulphonation is performed in step (ii).

Claim 93. (new) The method according to claim 90 wherein said desulphonation is performed in steps (i) and (ii).

Claim 94. (new) The method according to claim 90 wherein said desulphonation is performed in step (iii).

Claim 95. (new) The method according to claim 90 wherein said desulphonation is performed in steps (i) and (iii).

Claim 96. (new) The method according to claim 90 wherein said desulphonation is performed in step (iv).

Claim 97. (new) The method according to claim 90 wherein said desulphonation is performed in steps (i) and (iv).

Claim 98. (new) The method according to claim 79 wherein said desulphonation is performed in presence of a reducing agent selected from DTT, DTE or TCEP.

Claim 99. (new) The method according to claim 89 wherein said desulphonation is performed in presence of a reducing agent selected from DTT, DTE or TCEP.

Claim 100. (new) The method according to claim 90 wherein said desulphonation is performed in presence of a reducing agent selected from DTT, DTE or TCEP.

Claim 101. (new) The method according claim 98 wherein said reducing agent is used in a concentration range of 0.1 mM to 1 M.

Claim 102. (new) The method according claim 99 wherein said reducing agent is used in a concentration range of 0.1 mM to 1 M.

Claim 103. (new) The method according claim 100 wherein said reducing agent is used in a concentration range of 0.1 mM to 1 M.

Claim 104. (new) The immunoassay kit according to claim 38 which is an ELISA kit, a QUICK test kit or a Line Immunoassay kit.

Claim 105. (new) The method according to claim 79 wherein said produced immunoassay kit is an ELISA kit, a QUICK test kit or a Line Immunoassay kit.

Claim 106. (new) The method according to claim 89 wherein said produced immunoassay kit is an ELISA kit, a QUICK test kit or a Line Immunoassay kit.

Claim 107. (new) The method according to claim 90 wherein said produced immunoassay kit is an ELISA kit, a QUICK test kit or a Line Immunoassay kit.

Claim 108. (new) The immunoassay kit according to claim 38 wherein said solid phase is selected from the group consisting of a microtiter plate, a nylon strip, a nitrocellulose strip and a silicon chip.

Claim 109. (new) The immunoassay kit according to claim 108 wherein said solid phase further comprises at least one of a positive control and a +/- cutoff control.

Claim 110. (new) The immunoassay kit according to claim 38, said solid phase further comprising at least one additional HCV antigen selected from the group consisting of an antigen of the Core region, an antigen of the E2 hypervariable region, an antigen of the NS4A region, an antigen of the NS4B region, and an antigen of the NS5A region.